

PRECAST DECK PANEL SECTION (A)

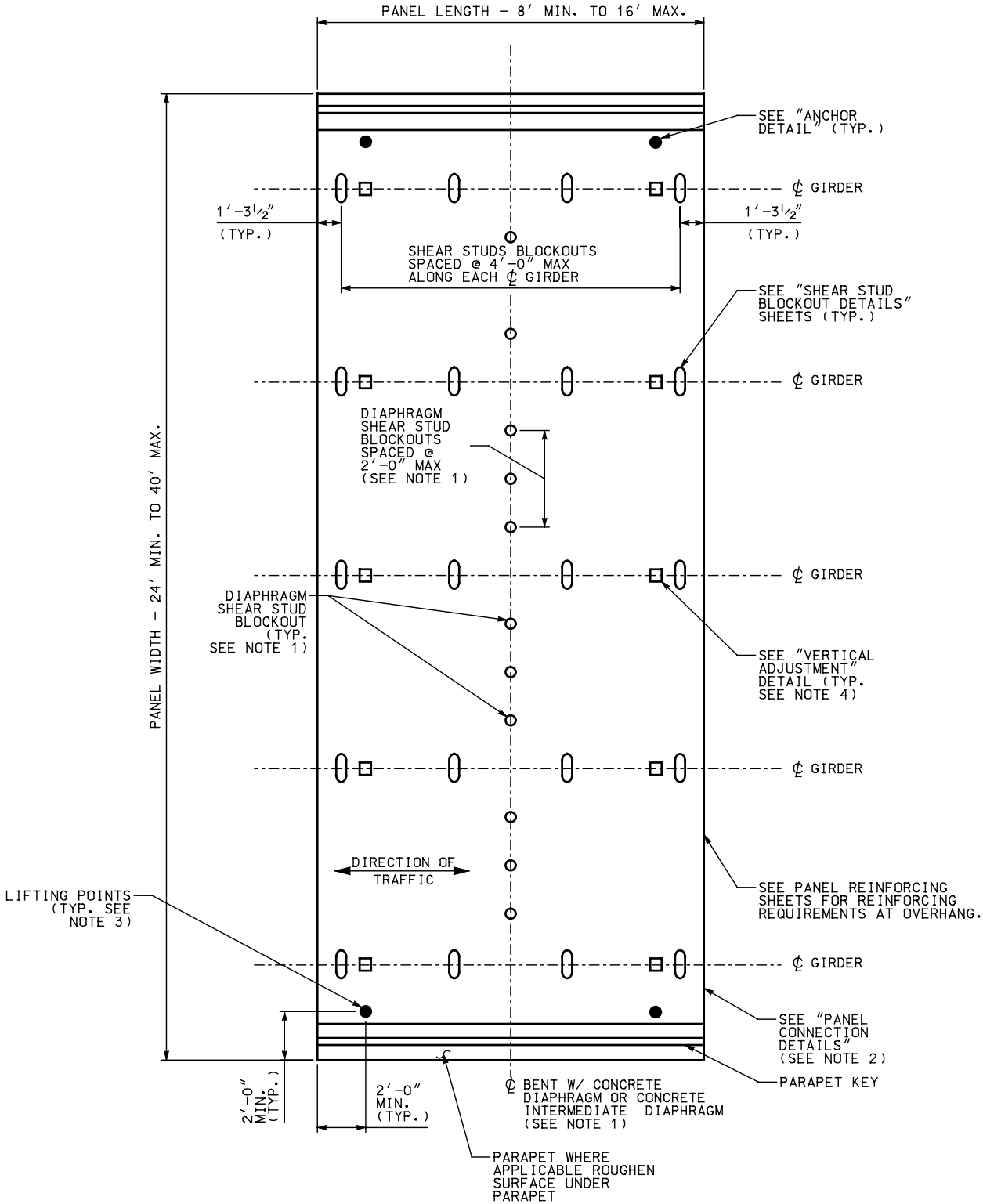
STANDARD PRECAST CONCRETE PANEL APPLICATIONS

STD. DWG. NO.
PDP - 2

PRECAST CONCRETE PANEL QUANTITIES		
TYPE	S.F.	NO.

NOTES:

- DIAPHRAGM SHEAR STUD BLOCKOUTS REQUIRED ONLY FOR PANEL TYPE IBP#.
- FOR PANEL TYPE EP#, OMIT PANEL CONNECTIONS ALONG THE APPROPRIATE TRANSVERSE EDGE OF PANEL WHEN USING CONNECTION OPTIONS 1 OR 2.
- CONTRACTOR WILL DETERMINE NUMBER AND LOCATION OF LIFTING POINTS. SEE "ANCHOR DETAIL" ON MISC PANEL DETAIL SHEET.
- A MINIMUM OF 2 VERTICAL ADJUSTMENT ASSEMBLIES ARE REQUIRED AT ϕ EACH GIRDER.
- FOR VERTICAL ADJUSTMENTS, SHEAR STUD BLOCKOUTS AND ANCHORS SEE "MISC PANEL DETAILS" SHEET.
- FOR DETAILS OF SHEAR STUD BLOCKOUT SEE "SHEAR STUD BLOCKOUT DETAILS" SHEET.
- SEE PANEL REINFORCING SHEETS FOR REQUIRED REINFORCING.
- SEE PANEL CONNECTION SHEETS FOR CONNECTION DETAILS.

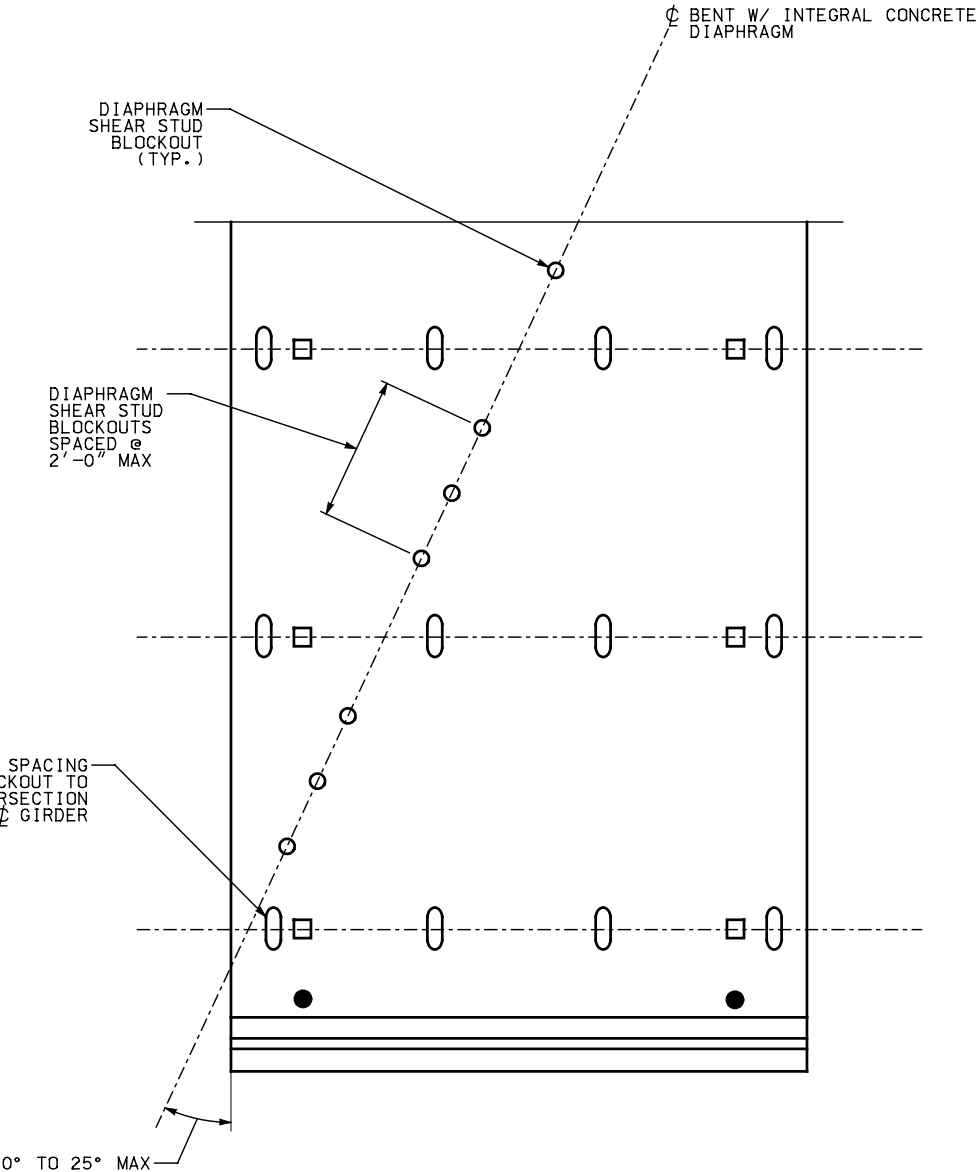


PANEL BLOCKOUT PLAN

SHOWING PANEL TYPE IBP# - OTHER PANEL TYPES DIFFER AS NOTED.

SIZE OF PANEL, GIRDER NUMBER AND SPACING, AND OVERHANG FOR ILLUSTRATION ONLY. SEE GENERAL NOTES SHEET FOR ACTUAL USAGE LIMITS

DESIGNER MAY ADJUST SPACING OF SHEAR STUD BLOCKOUT TO AVOID CONFLICT AT INTERSECTION OF ϕ BENT AND ϕ GIRDER



PANEL IBP BLOCKOUT PARTIAL PLAN

SHOWING SKEWED CONDITION, FOR DETAILS NOT SHOWN. SEE "PANEL BLOCKOUT PLAN" THIS SHEET.

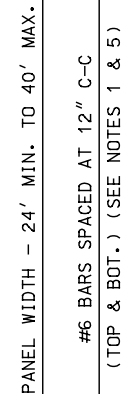
USE ONLY FOR BRIDGE DESIRED AS SIMPLE SPAN FOR DL CONTINUOUS FOR LL.

REVISEIONS		DRAFT - NOT RELEASED		FOR CONSTRUCTION	
NO.	DATE	APPR.	DATE	NO.	REMARKS

UTAH DEPARTMENT OF TRANSPORTATION		STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION		SALT LAKE CITY, UTAH	
RECOMMENDED FOR APPROVAL		CHAIRMAN STANDARDS COMMITTEE		DEPUTY DIRECTOR	

FULL DEPTH PRECAST CONCRETE DECK PANELS		TYPICAL PLAN PANEL	

1. LOCATION OF BARS TO BE ADJUSTED TO AVOID CONFLICTS WITH BLOCKOUTS AS APPROVED BY DESIGNER.
2. EDGE BARS SHOWN FOR WELDED TIE OR SHEAR KEYWAY TYPE CONNECTIONS. FOR LONGITUDINAL POST-TENSIONED CONNECTION SEE DETAIL A, THIS SHEET.
3. STEEL GIRDER SHOWN, PRESTRESSED BULB TEE GIRDERS ALLOWED.
4. TOP BARS TO HAVE STD 180° HOOK EACH END.
5. DESIGNER TO DETERMINE ANY ADDITIONAL LONGITUDINAL NEGATIVE MOMENT REINFORCEMENT REQUIRED.
6. DESIGNER TO VERIFY REINFORCEMENT SIZE AND SPACING.
7. FOR BRIDGES WITH VARYING CROSS-SLOPES, SEE CLOSURE POUR DETAILS.
8. SEE PANEL CONNECTION SHEETS FOR CONNECTION DETAILS.
9. FOR ROADWAYS WITH CROWNS, A CLOSURE POUR WILL BE REQUIRED AT THE CROWN. THIS WILL REQUIRE MULTIPLE PANELS IN A CROSS SECTION. SEE CROWN CLOSURE POUR DETAILS ON SHEET PDP--



SHOWING PANEL TYPE IBP#-SEE "TYPICAL PANEL PLAN" SHEET FOR OTHER PANEL TYPES.

SIZE OF PANEL, GIRDER NUMBER AND SPACING, AND OVERHANG FOR ILLUSTRATION ONLY. SEE GENERAL NOTES SHEET FOR ACTUAL USAGE LIMITS.



UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH



SIZE OF PANEL, GIRDER NUMBER AND SPACING, AND
OVERHANG FOR ILLUSTRATION ONLY. SEE
GENERAL NOTES SHEET FOR ACTUAL USAGE LIMITS.



PRECAST PANEL SECTION

1. LOCATION OF BARS TO BE ADJUSTED TO AVOID CONFLICTS WITH BLOCKOUTS AS APPROVED BY DESIGNER.
2. **NOTES:**
~~EDGE BARS SHOWN FOR WELDED TIE OR SHEAR KEYWAY TYPE CONNECTIONS. FOR LONGITUDINAL POST-TENSIONED CONNECTION SEE DETAIL A, THIS SHEET.~~
3. STEEL GIRDER SHOWN, PRESTRESSED BULB TEE GIRDERS
4. TOP BARS TO HAVE STD 180° HOOK EACH END.
5. DESIGNER TO DETERMINE ANY ADDITIONAL LONGITUDINAL NEGATIVE MOMENT REINFORCEMENT REQUIRED.
6. DESIGNER TO VERIFY REINFORCEMENT SIZE AND SPACING.
7. FOR BRIDGES WITH VARYING CROSS SLOPES, SEE CLOSURE POUR DETAILS.
8. FOR ROADWAYS WITH CROWNS, A CLOSURE POUR WILL BE REQUIRED AT THE CROWN. THIS WILL REQUIRE MULTIPLE PANELS IN A CROSS SECTION. SEE CROWN CLOSURE POUR DETAILS ON SHEET PDP-6

UTAH DEPARTMENT OF TRANSPORTATION

STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

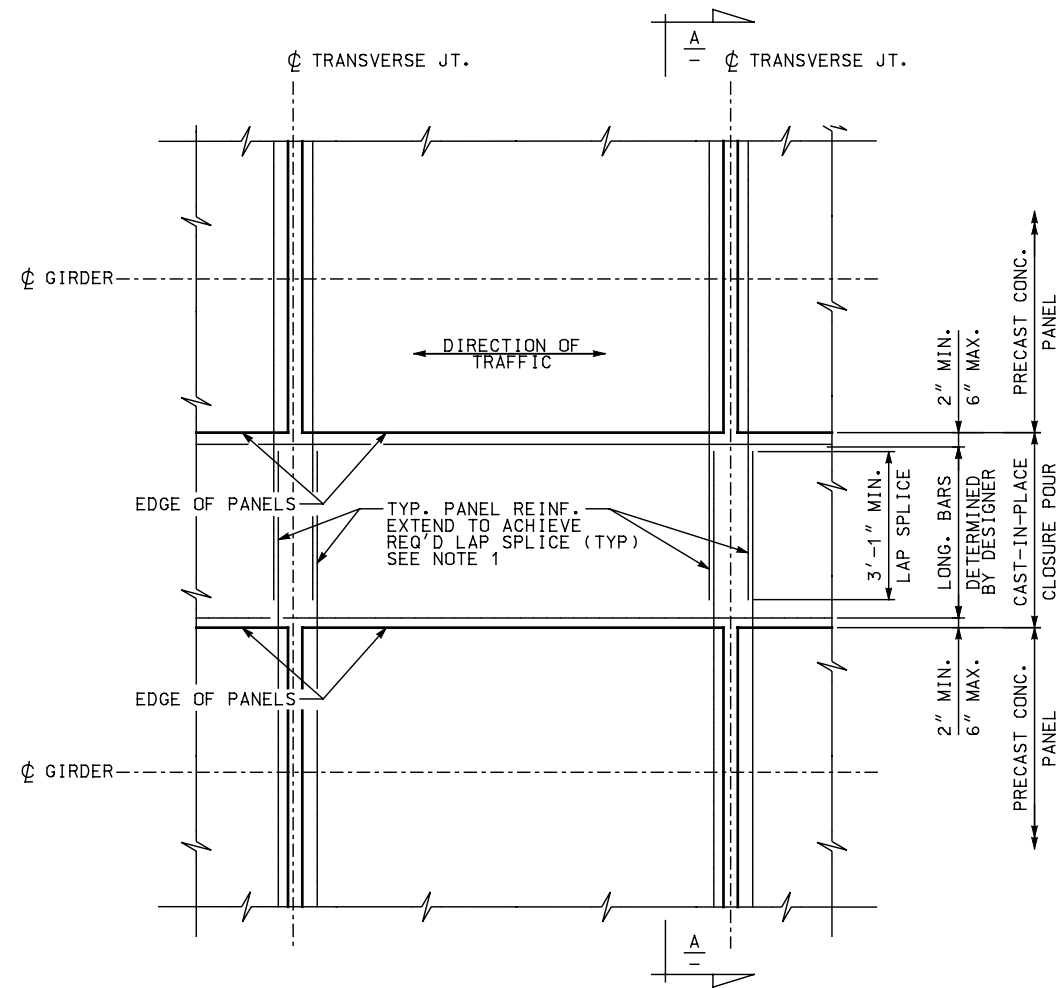
RECOMMENDED FOR APPROVAL

CHAIRMAN STANDARDS COMMITTEE
APPROVED

DEPUTY DIRECTOR

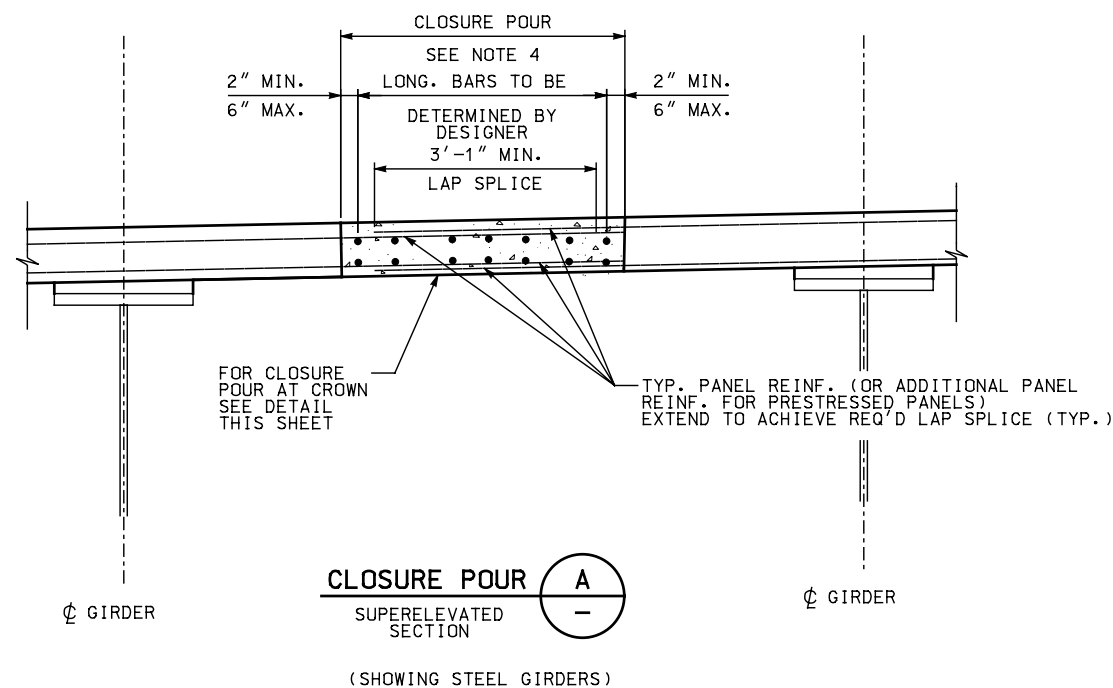
**FULL DEPTH PRECAST
CONCRETE DECK PANELS**

STD. DWG. NO.
PDP - 5

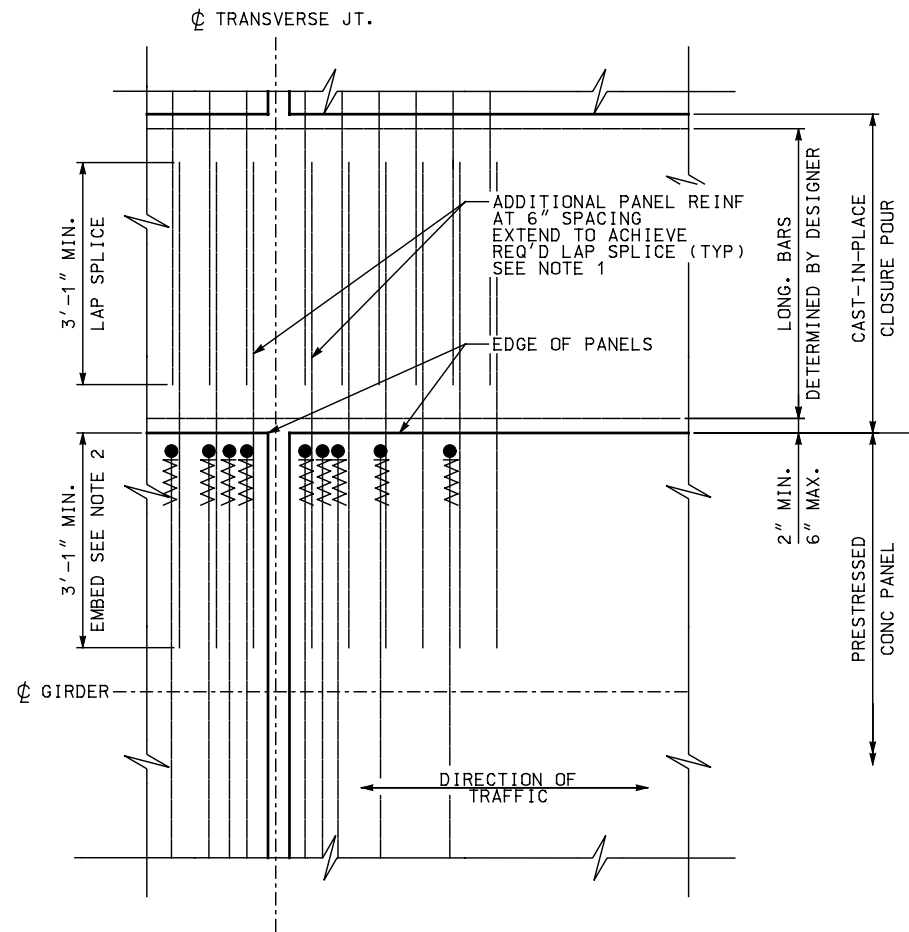


CLOSURE POUR PLAN

(PRECAST PANELS SHOWN - SEE CLOSURE POUR PART-PLAN FOR CLOSURE POUR USING PRESTRESSED PANELS)

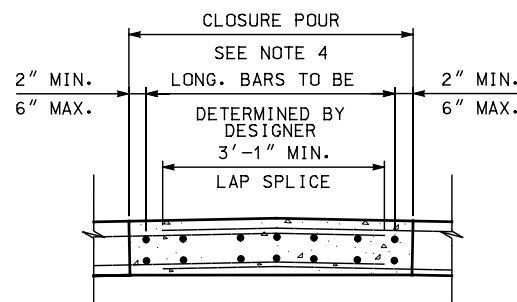


CLOSURE POUR
SUPERELEVATED SECTION
(SHOWING STEEL GIRDERS)

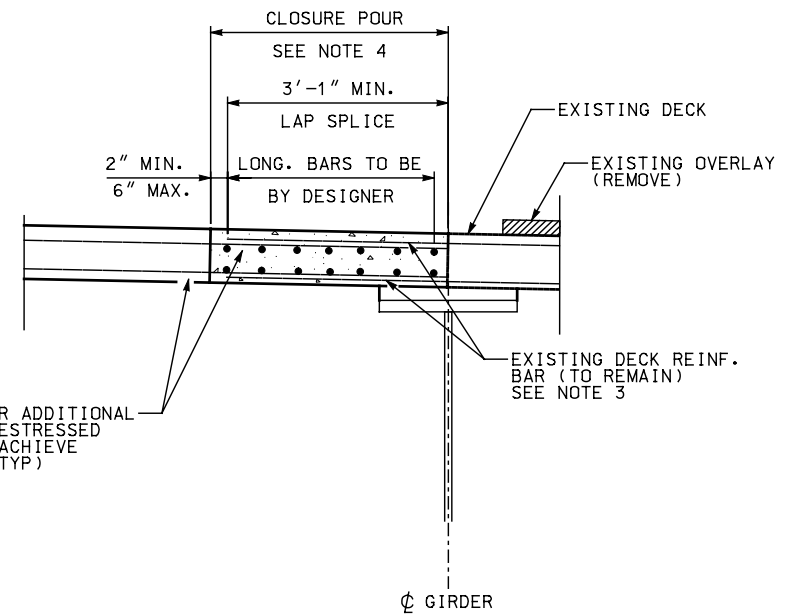


CLOSURE POUR PART-PLAN

(PRESTRESSED PANELS SHOWN)



CLOSURE POUR
SECTION AT CROWN (A)



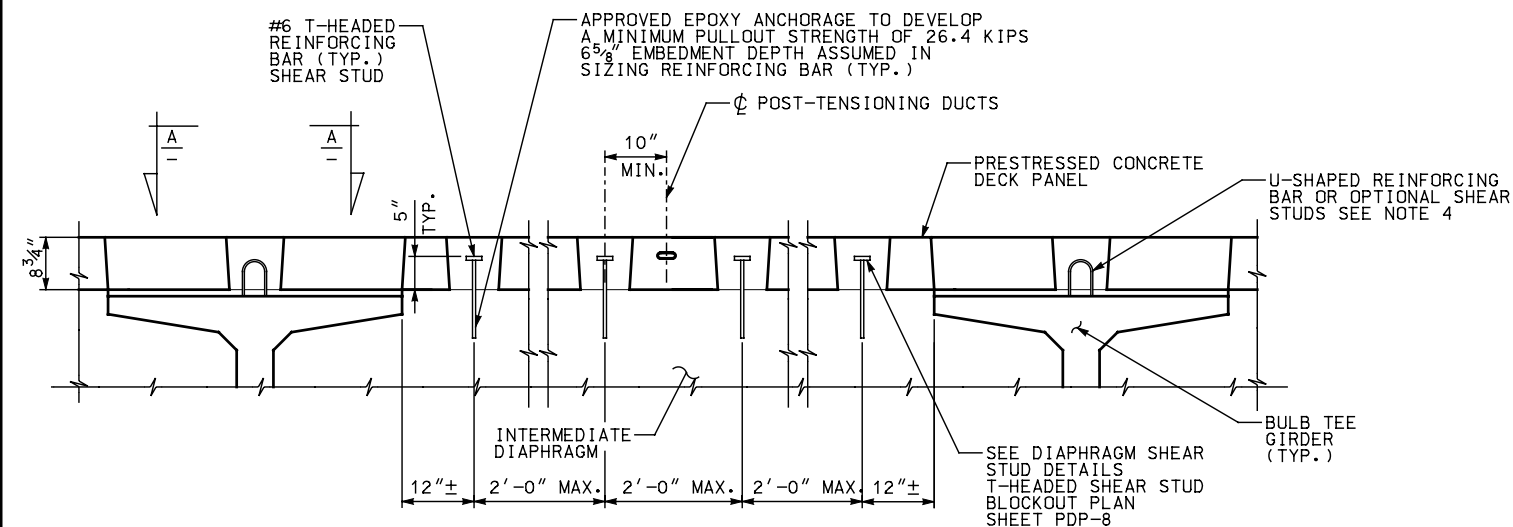
CONTRACTOR TO SUPPLY FULL-LENGTH TEMPORARY SUPPORT, AS DIRECTED BY THE ENGINEER, TO THE PANEL OVERHANG AT THE CLOSURE POUR UNTIL THE CLOSURE POUR HAS GAINED FULL COMPRESSIVE STRENGTH.

CLOSURE POUR TO EXISTING DECK SECTION
(SHOWING STEEL GIRDERS)

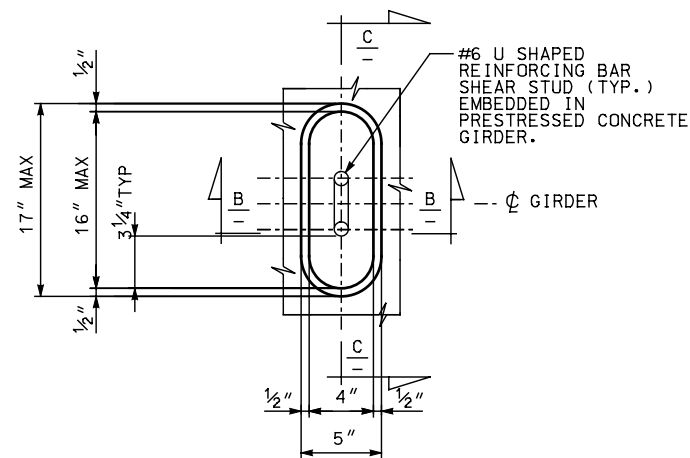
NOTES:

1. MINIMUM REINFORCEMENT SHOWN. IT IS THE RESPONSIBILITY OF THE DESIGNER TO DETERMINE ACTUAL REINFORCEMENT REQUIRED.
2. AS AN ALTERNATIVE TO EMBEDDING BARS IN PRESTRESSED PANELS, THREADED INSERTS MAY BE ALLOWED AS DIRECTED BY THE DESIGNER. IN PRECAST PANEL WITHOUT PRESTRESSING, PANEL REINFORCEMENT, TOP AND BOTTOM, WILL BE CONTINUED INTO CLOSURE POUR.
3. PROTECT EXISTING REINFORCING BARS WHEN REMOVING THE PORTION OF EXISTING DECK. BEFORE MAKING THE CLOSURE POUR, ALL EXISTING REINFORCING IS TO BE CLEANED OF RUST AND FOREIGN MATERIAL. RECOAT BAR IF ORIGINAL WAS EPOXY COATED AND DAMAGED.
4. WHEN GIRDER SPACING EXCEEDS 7'-0" CONTRACTOR WILL SUPPLY FULL-LENGTH TEMPORARY SUPPORT TO THE PANEL OVERHANG AND CLOSURE POUR UNTIL CLOSURE POUR HAS GAINED FULL COMPRESSIVE STRENGTH.
5. CLOSURE POUR DETAILS SHOWN FOR MAXIMUM BEAM SPACING OF 10'-0". AT A MINIMUM, EXTEND CONTINUOUS REINFORCEMENT, TOP AND BOTTOM, FROM PRECAST PANEL, #6 AT 6" SPACING INTO CLOSURE POUR.
6. FOR BEAM SPACINGS GREATER THAN 10'-0", DESIGNER WILL DESIGN AND DETAIL CLOSURE POUR AND APPROPRIATE POST-TENSIONING AS REQUIRED.

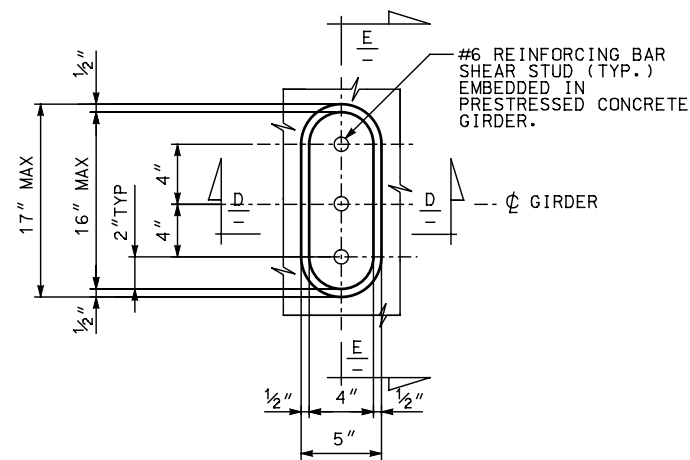
REVISONS		DRAFT - NOT RELEASED		FOR CONSTRUCTION	
NO.	DATE	APPR.	DATE	NO.	DATE
REMARKS					
UTAH DEPARTMENT OF TRANSPORTATION					
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION					
SALT LAKE CITY, UTAH					
RECOMMENDED FOR APPROVAL					
CHAIRMAN STANDARDS COMMITTEE					
APPROVED					
DEPUTY DIRECTOR					
FULL DEPTH PRECAST CONCRETE DECK PANELS					
CLOSURE POUR DETAILS					
STD. DWG. NO.					
PDP - 6					



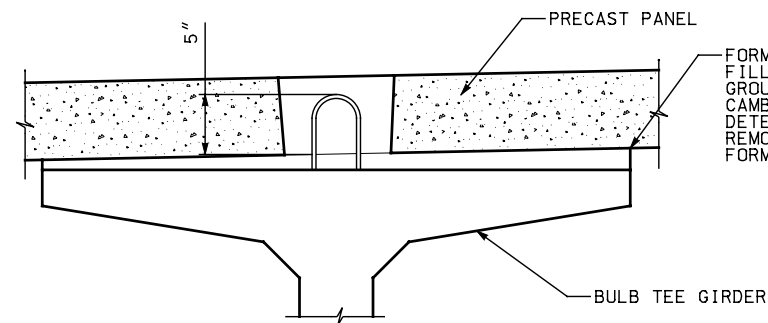
INTERMEDIATE DIAPHRAGM ELEVATION - NEW CONSTRUCTION



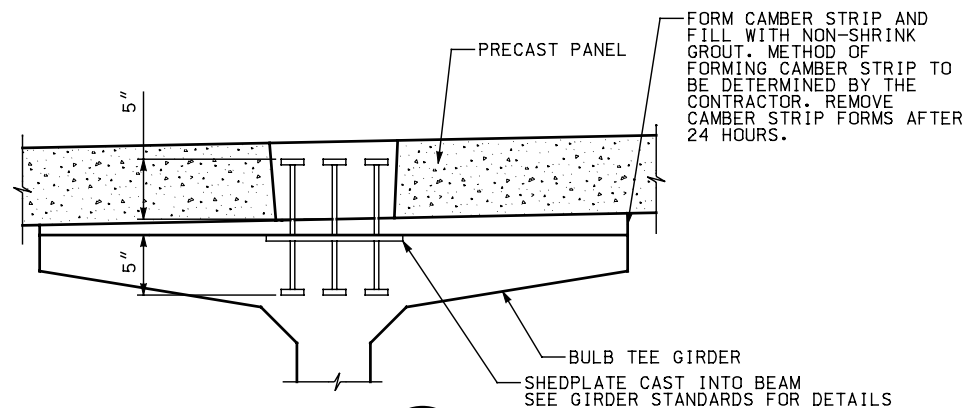
U - SHAPED REINFORCING BAR
SHEAR STUD BLOCKOUT PLAN
(OVER GIRDERS) OPTION 1



WELDED PLATE SHEAR STUD CONNECTOR
(OVER GIRDERS) OPTION 2



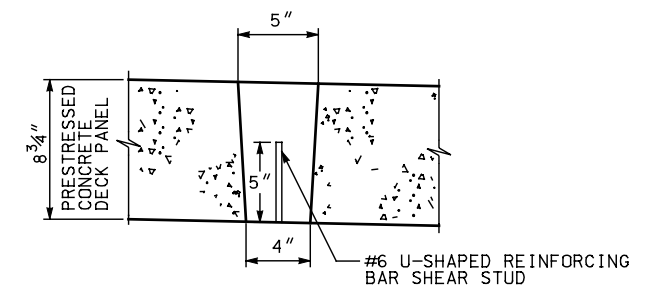
SECTION C



SECTION E
OPTION 2

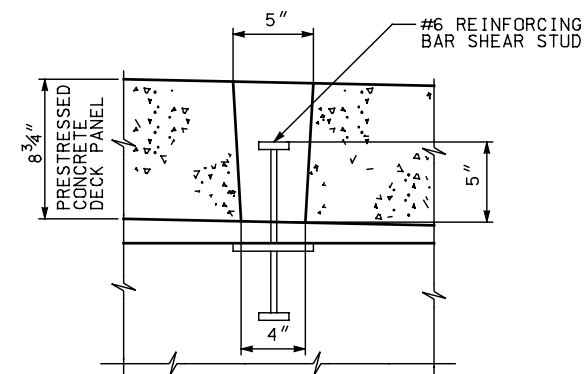
NOTES:

1. INCLUDE COST OF SHEAR STUDS IN PAY ITEM "PRESTRESSED CONCRETE DECK PANEL".
2. INCLUDE COST OF ALL NON-SHRINK GROUT IN PAY ITEM "PRESTRESSED CONCRETE DECK PANEL".
3. TOP SURFACE OF DECK AND INSIDE FACE OF SHEAR BLOCKOUTS WILL HAVE A HEAVY BROOM FINISH.
4. OPTIONAL SHEAR STUDS INCLUDE WELDED PLATE DETAIL OR T-HEADED SHEAR STUDS



SECTION B
OPTION 1

NOTE: BARS MAY BE BUNDLED TO PROVIDE
ADEQUATE SHEER RESISTANCE.



SECTION D
OPTION 2

REVISIONS

DRAFT - NOT RELEASED

FOR CONSTRUCTION

REMARKS

APPR.

DATE

NO.

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL

CHAIRMAN STANDARDS COMMITTEE
APPROVED

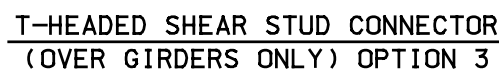
DEPUTY DIRECTOR

DATE

DATE

PRECAST CONCRETE
DECK PANEL
SHEAR STUD BLOCKOUT
DETAILS 1

STD. DWG. NO.
PDP - 7

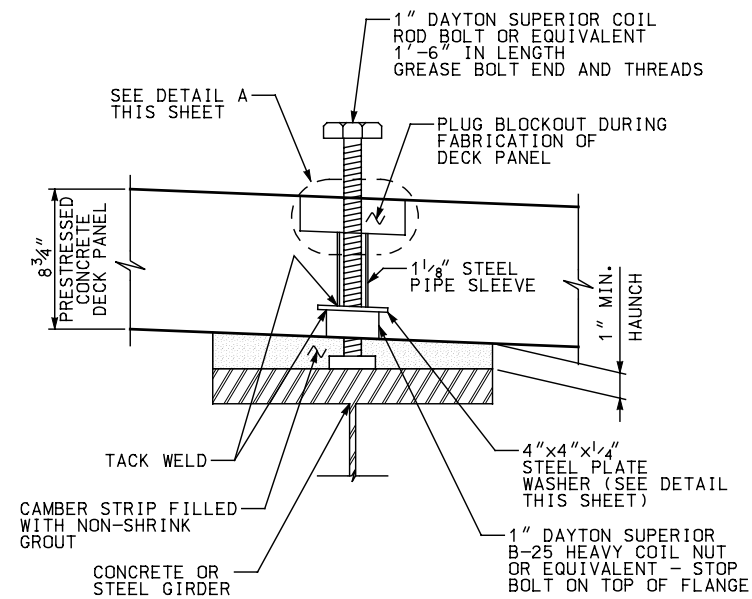


1. INCLUDE COST OF SHEAR STUDS IN PAY ITEM "PRESTRESSED CONCRETE DECK PANEL".
2. INCLUDE COST OF ALL NON-SHRINK GROUT IN PAY ITEM "PRESTRESSED CONCRETE DECK PANEL".
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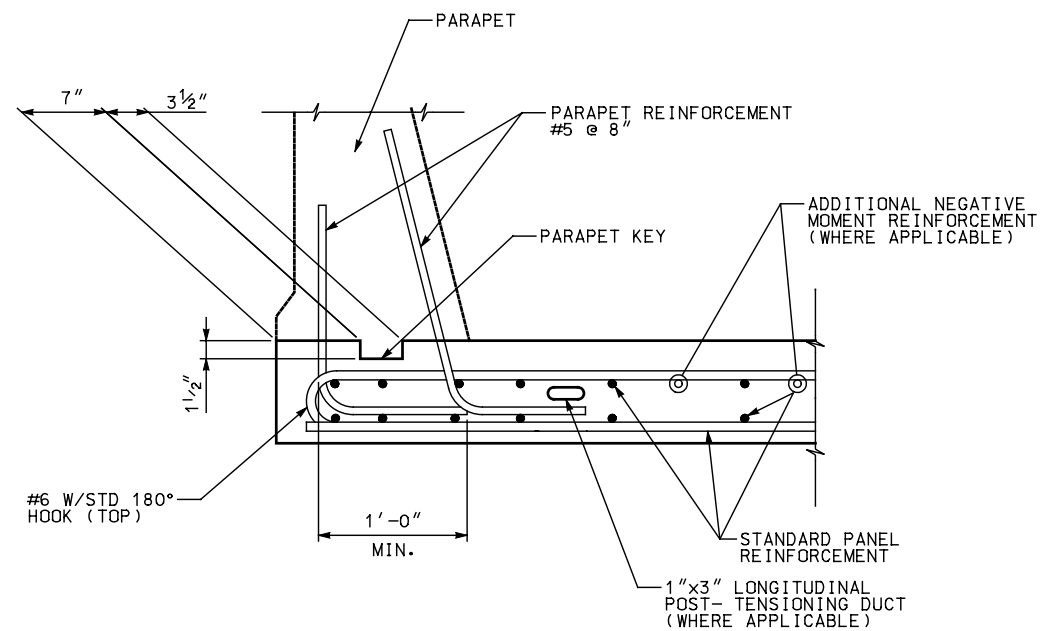


NOTE:
STUD TYPE SHEAR CONNECTORS WILL BE
HEADED ANCHOR STUDS CONFORMING
TO THE DIMENSIONS SHOWN ON THE PLANS.
THEY WILL BE MANUFACTURED FROM STEEL
CONFORMING TO THE REQUIREMENTS OF
AASHTO M-169. THEY WILL BE FIELD
WELDED WITH EQUIPMENT DESIGNED FOR
STUD WELDING OPERATIONS. EQUIPMENT
CAPACITY SHALL BE ADEQUATE FOR THE
SIZE OF STUD BEING WELDED.

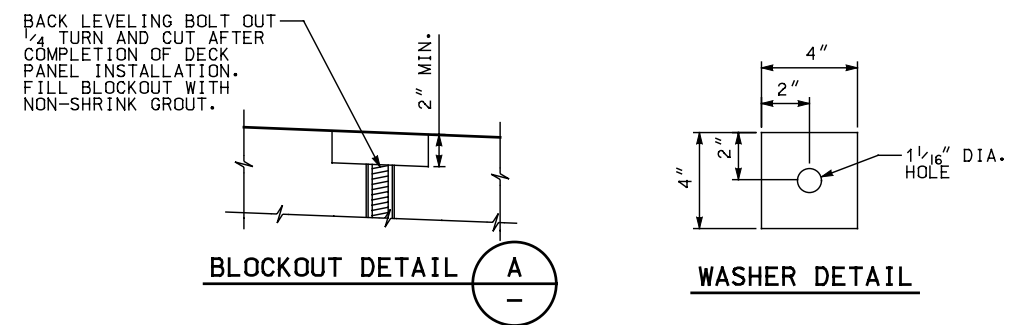
FULL DEPTH PRECAST CONCRETE DECK PANELS <hr/> SHEAR STUD BLOCKOUT DETAILS 2	UTAH DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION SALT LAKE CITY, UTAH							
	RECOMMENDED FOR APPROVAL							
	CHAIRMAN STANDARDS COMMITTEE APPROVED							
	DEPUTY DIRECTOR							
STD. DWG. NO. PDP - 8					REVISIONS			



VERTICAL ADJUSTMENT DETAIL
(STEEL GIRDER SHOWN)

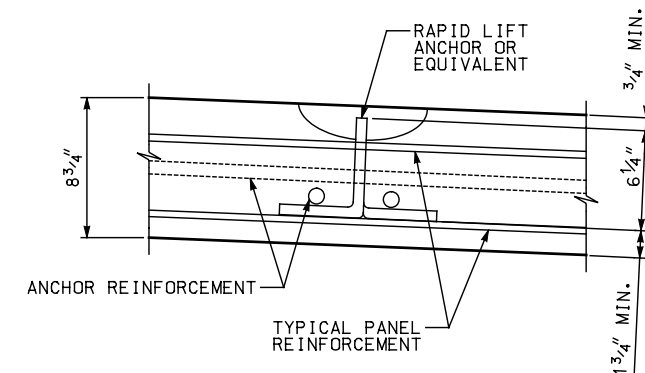


PARAPET CONNECTION DETAIL

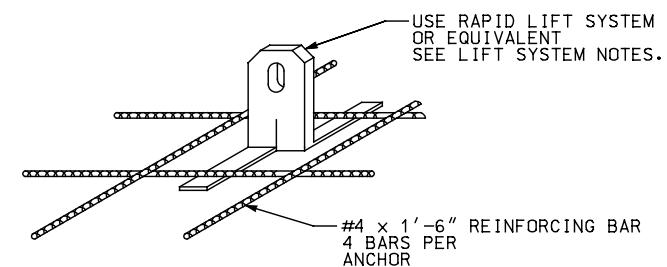


BLOCKOUT DETAIL

WASHER DETAIL



LIFT ANCHOR ELEVATION

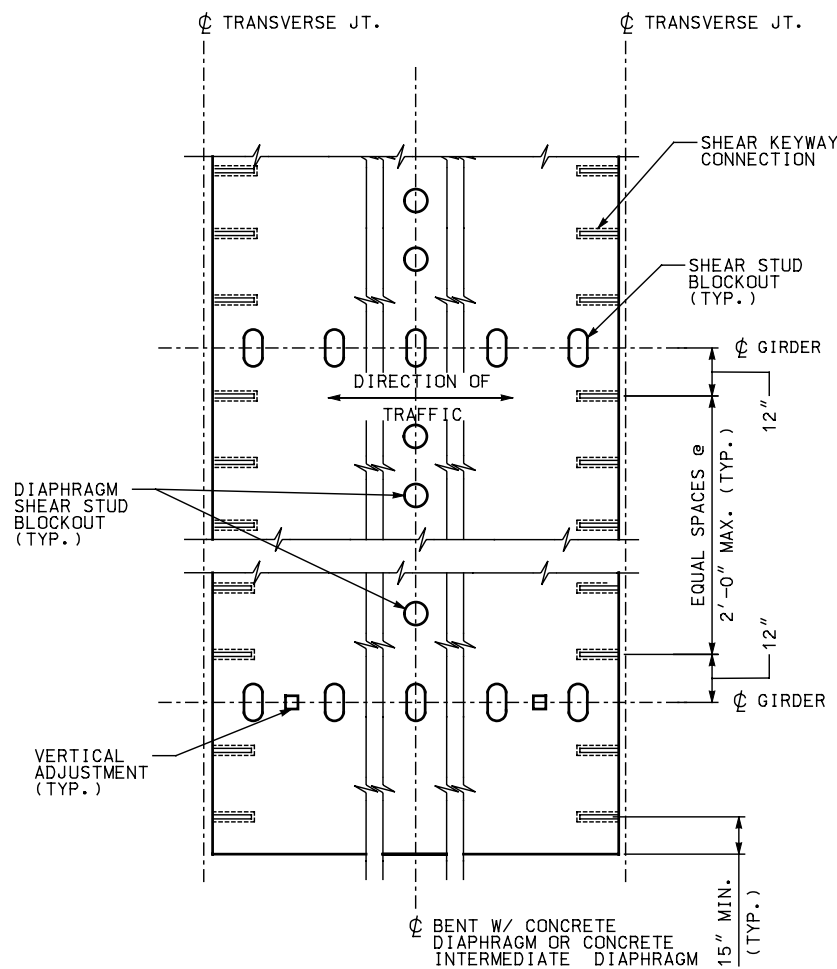


LIFT SYSTEM NOTES:

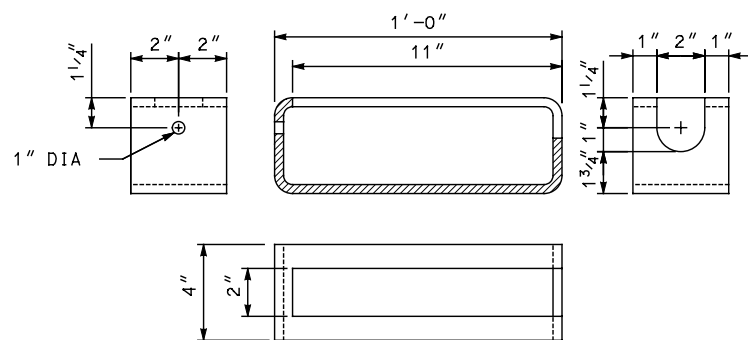
1. USE RAPID LIFT SYSTEM WITH ALLOWABLE TENSION LOAD OF 12,000 LBS OR EQUIVALENT.
2. USE A RECESSING MEMBER ASSEMBLY.
3. PLACE LIFTING DEVICES A MINIMUM DISTANCE OF 2 FT FROM THE EDGES.
4. CONTRACTOR IS RESPONSIBLE FOR LOCATION OF THE LIFT SYSTEM AND WILL SUBMIT PLANS AND HANDLING STRESS CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION OF PANELS.

LIFT ANCHOR DETAIL
ISOMETRIC VIEW

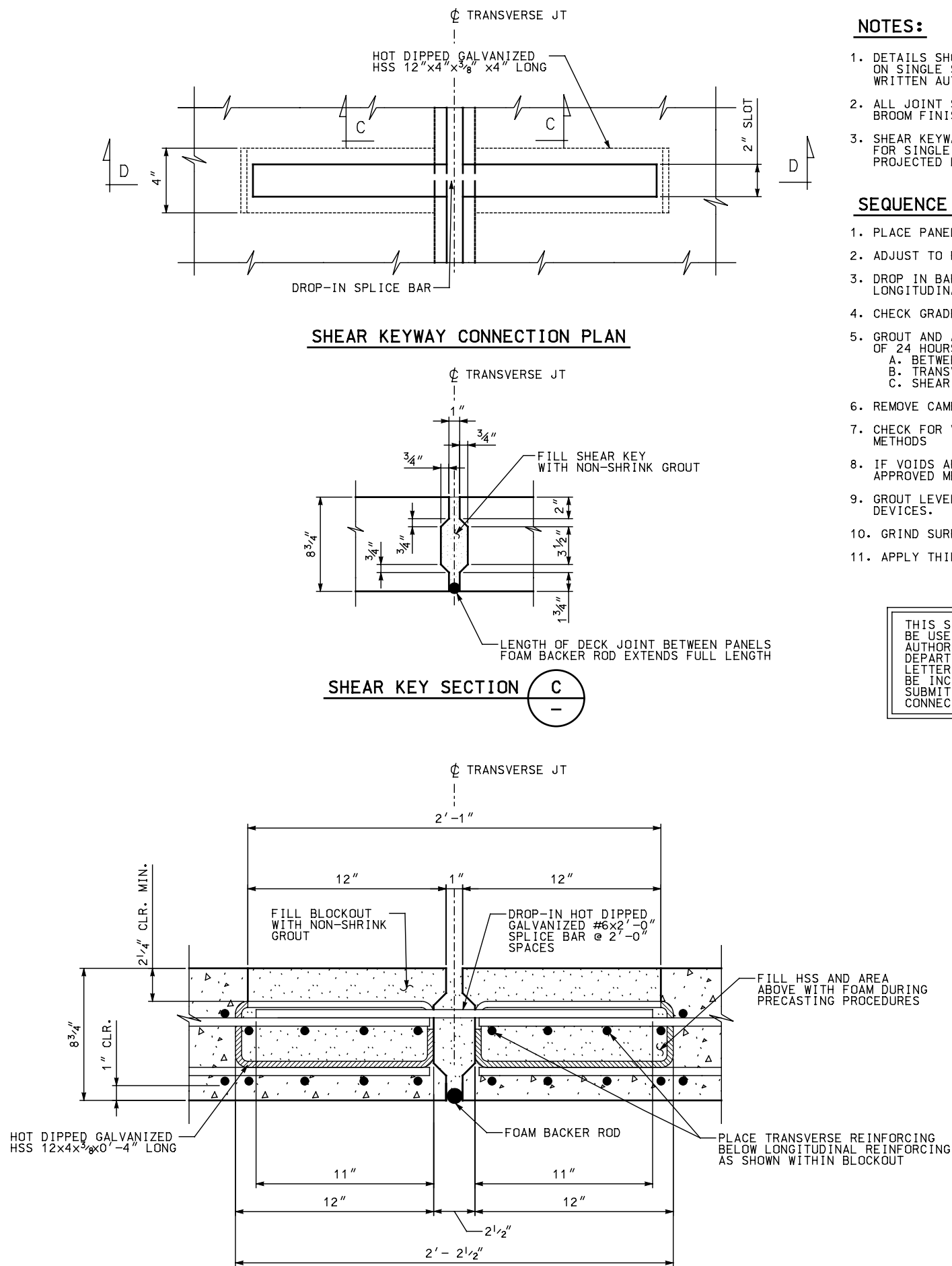
FULL DEPTH PRECAST CONCRETE DECK PANELS <u>MISCELLANEOUS PANEL DETAILS</u>	UTAH DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION SALT LAKE CITY, UTAH		REVISIONS			
	RECOMMENDED FOR APPROVAL CHAIRMAN STANDARDS COMMITTEE APPROVED DEPUTY DIRECTOR		DRAFT - NOT RELEASED			
			FOR CONSTRUCTION			
			NO. DATE APPR.			
			REMARKS			



PANEL BLOCKOUT PLAN
SHOWING CLEARANCES REQUIRED
TO CONNECTION KEYWAYS



HOLLOW STRUCTURAL SECTION
IN SHEAR KEYWAY



SHEAR KEY SECTION C

SHEAR KEY SECTION D

NOTES:

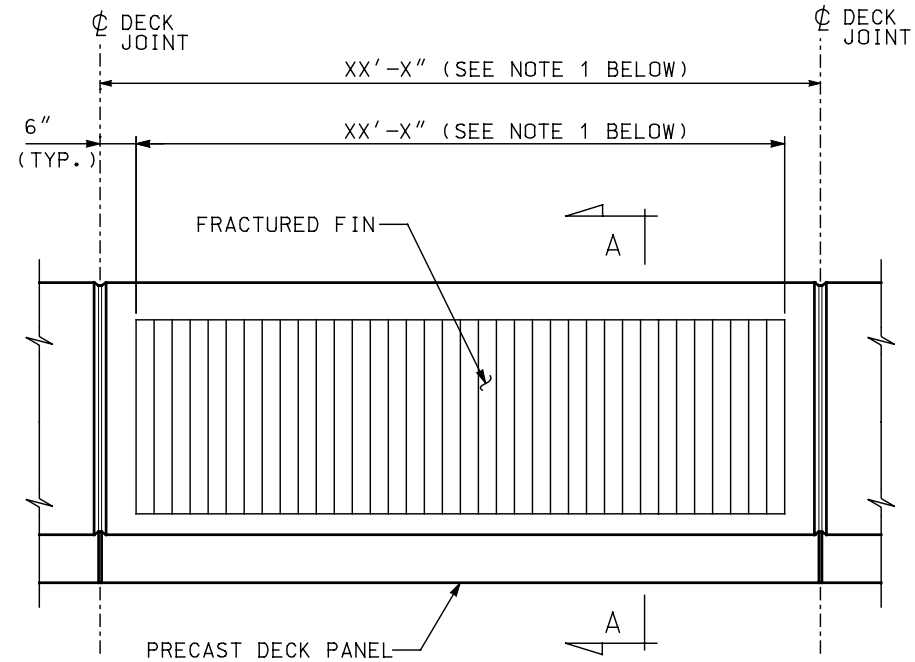
1. DETAILS SHOWN ON THIS SHEET TO BE USED ONLY ON SINGLE SPAN STRUCTURES, UNLESS PRIOR WRITTEN AUTHORIZATION FROM UDOT IS GRANTED.
2. ALL JOINT SURFACES WILL HAVE A HEAVY BROOM FINISH.
3. SHEAR KEYWAY CONNECTION WILL BE USED ONLY FOR SINGLE SPAN STRUCTURES WITH A PROJECTED LIFE-SPAN OF 15 YEARS OR LESS.

SEQUENCE OF CONSTRUCTION:

1. PLACE PANELS
2. ADJUST TO REQUIRED GRADE
3. DROP IN BAR AND TIE TO EXISTING LONGITUDINAL REINFORCEMENT
4. CHECK GRADE AND ADJUST
5. GROUT AND ALLOW TO CURE FOR MINIMUM OF 24 HOURS:
 - A. BETWEEN CAMBER STRIPS
 - B. TRANSVERSE JOINT
 - C. SHEAR BLOCKOUTS
6. REMOVE CAMBER STRIPS AND LEVELING BOLTS
7. CHECK FOR VOIDS VIA VISUAL AND TAPPING METHODS
8. IF VOIDS ARE FOUND REPAIR PER UDOT APPROVED METHOD
9. GROUT LEVELING BOLTS AND AT LIFTING DEVICES.
10. GRIND SURFACE AS REQUIRED
11. APPLY THIN BONDED POLYMER OVERLAY

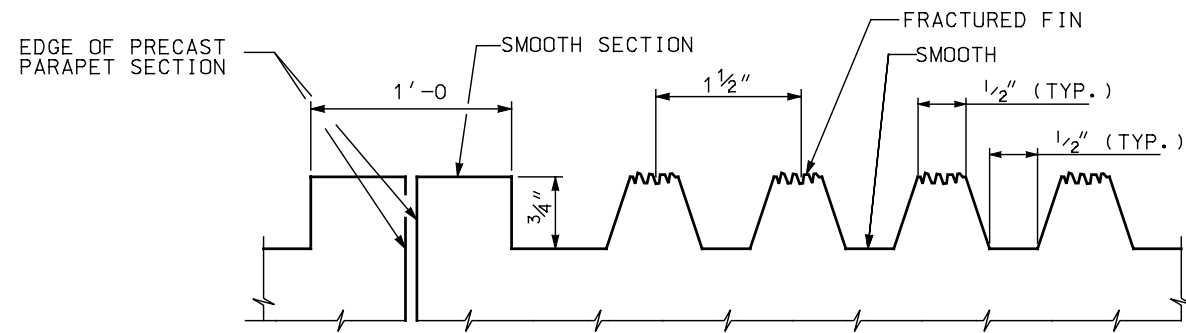
THIS SHEAR KEY CONNECTION WILL BE USED ONLY WITH PRIOR WRITTEN AUTHORIZATION FROM THE UTAH DEPARTMENT OF TRANSPORTATION. LETTER OF AUTHORIZATION WILL BE INCLUDED WITH ALL PLAN SET SUBMITTALS CALLING FOR THIS CONNECTION OPTION.

REVIEWS		DRAFT - NOT RELEASED		FOR CONSTRUCTION	
NO.	DATE	APPR.	DATE	NO.	DATE
UTAH DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION SALT LAKE CITY, UTAH					
RECOMMENDED FOR APPROVAL			CHAIRMAN STANDARDS COMMITTEE		
DEPUTY DIRECTOR			APPROVED		
FULL DEPTH PRECAST CONCRETE DECK PANEL			SHEAR KEY PANEL CONNECTION		
STD. DWG. NO.			PDP - 10		

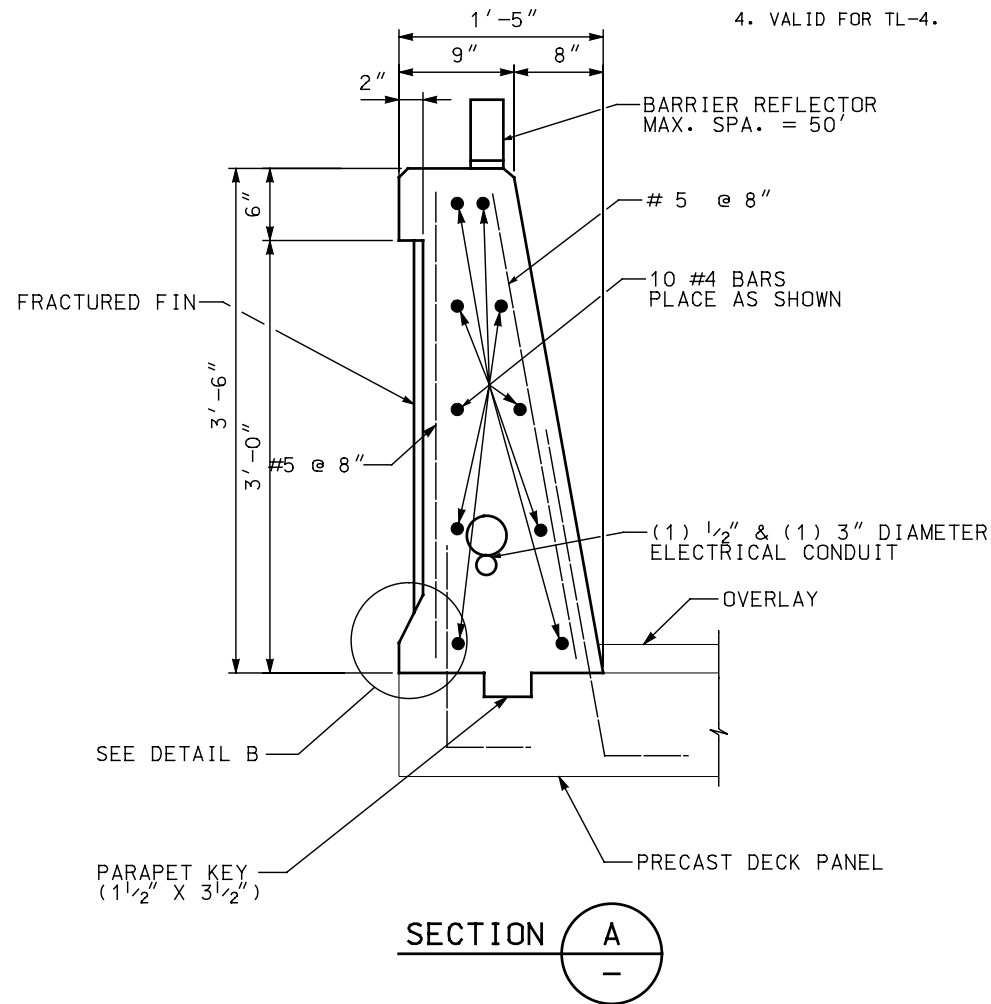


ELEVATION

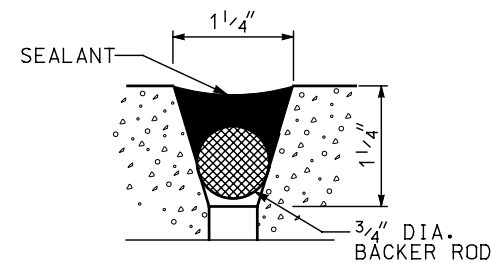
NOTES:
1. LENGTH BASED ON PRECAST DECK PANEL.
LENGTH AS DETERMINED BY DESIGNER.



FRACTURED FIN DETAIL



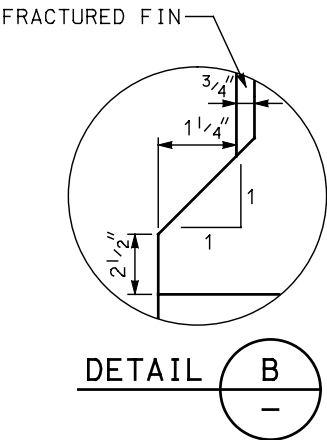
SECTION A



PARAPET JOINT DETAIL

NOTES

1. EXTEND SEALANT AND FOAM BACKER ROD FROM DECK TOP TO TOP OF PARAPET ON THE INSIDE PARAPET FACE, AND ACROSS TOP OF PARAPET.
2. ADJUST BAR SPACING AS REQUIRED TO NOT EXCEED MAXIMUM SPACING SHOWN.
3. FOR END DETAILS OF PARAPET, SEE "PARAPET END DETAILS" SHEET.
4. VALID FOR TL-4.



DETAIL B

QUANTITIES

PRECAST CONCRETE PARAPETS*	XX.X CU.YD.
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* FOR INFORMATION ONLY. PAID FOR IN PRECAST CONCRETE DECK PANEL PAY ITEM.

REVISECTIONS		DRAFT - NOT RELEASED		FOR CONSTRUCTION	
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UTAH DEPARTMENT OF TRANSPORTATION		STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION		SALT LAKE CITY, UTAH	
RECOMMENDED FOR APPROVAL		CHAIRMAN STANDARDS COMMITTEE		DEPUTY DIRECTOR	
FULL DEPTH PRECAST CONCRETE DECK PANELS		PARAPET DETAILS		STD. DWG. NO.	
				PDP - 11	